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ABSTRACT OF THE DISCLOSURE

A joint restraint assembly for connecting pipe ends together, or to other objects, which includes a body encircling the pipe. The body has a plurality of cavities adjacent to the pipe with a segment configured to fit into each cavity. One or more threaded bores are disposed through the body into each cavity. A threaded bolt extends through each threaded bore to engage the segment in that cavity, and to pre-load the segment against the pipe when assembled thereon. Mechanical or pressure loading, tending to pull the pipe out of the restraint assembly, causes the segment to self actuate, and the application of increasing load causes a proportional increase to the force engaging the segment to the pipe. The joint restraint assembly reliably accommodates comparatively high levels of mechanical loading and/or pipe internal pressure, and does so without relying upon the limited force produced by the threaded bolt pre-load on the segments at the time of assembly.